

Name: _____

Date: _____

Test Scores							
100	87	70	95	88	90	60	100

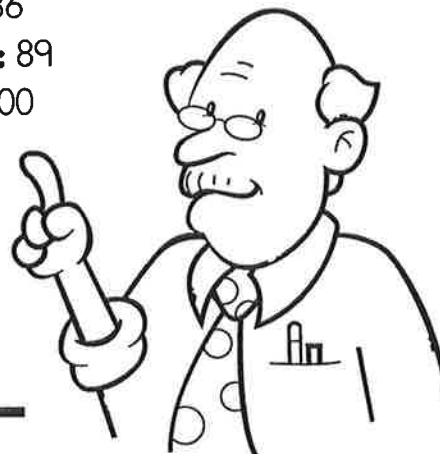
Mean: 86
Median: 89
Mode: 100

Mean is another word for average.

Median is the middle number in a group of numbers in numerical order. **NOTE: FOR EVEN SETS OF NUMBERS, TAKE THE AVERAGE OF THE MIDDLE TWO NUMBERS.**

Test scores: 60 70 87 88 **89** 90 95 100 100

Mode is the number that appears the most often.



Find the **mean**, **median**, and **mode** for each.

Basketball Points				
6	22	12	36	19

Golf Scores					
93	70	90	90	68	75

1. **Mean:** 19
Median: 12
Mode: none

2. **Mean:** 81
Median: 825
Mode: 90

	Data	mean	median	mode
A.	10, 17, 10, 14, 19	14	14	10
B.	18, 19, 64, 19, 32, 60, 61	39	32	19
C.	11, 38, 13, 38, 40	28	38	38
D.	12, 15, 11, 15, 13, 10, 15	13	13	15
E.	87, 81, 95, 79, 83, 79	84	82	79
F.	96, 62, 97, 100, 96, 87, 85	89	96	96

Tip:

The first two letters in **mode** are **mo** = **most often**. Also, **median** means middle – the median of a highway separates traffic in the middle.

Combining Like Terms

(answer sheet)

1.) $x + 2x = 3x$

2.) $2x - x = x$

3.) $4x + 2x = 6x$

4.) $6x - 3x = 3x$

5.) $5x + x = 6x$

6.) $2x + 2x = 4x$

7.) $7x - 5x = 2x$

8.) $3x - 2x = x$

9.) $x + x = 2x$

10.) $x^2 + 2x^2 = 3x^2$

11.) $4x^2 - 3x^2 = x^2$

12.) $3x^2 + 2x^2 = 5x^2$

13.) $2x^2 + 2x + x^2 + x =$
 $3x^2 + 3x$

14.) $5x + x^2 - 2x + x^2 =$
 $3x + 2x^2$

15.) $3x + 2x - x + 2x^2 =$
 $4x + 2x^2$

16.) $6x + 3x^2 - x - x^2 =$
 $5x + 2x^2$

17.) $4x + 3 + x^2 - x =$
 $3x + 3 + x^2$

18.) $2x + 3x + 9 + x =$
 $6x + 9$

19.) $2x^2 + 3 + 3x - 1 =$
 $2x^2 + 2 + 3x$

20.) $2x + 5 + x^2 - x =$
 $x + 5 + x^2$

21.) $2x + 4y - x + y =$
 $x + 5y$

22.) $2y + x + 3x - y =$
 $y + 4x$

23.) $x + y + 2y - 4 =$
 $x + 3y - 4$

24.) $5 + 2x + y + 2x - 1 =$
 $4 + 4x + y$

25.) $3y + 2 + 2y + 5 =$
 $5y + 7$

26.) $2x + 2y + x^2 - x + x^2 =$
 $x + 2y + 2x^2$

Algebra Practice Problems

Complete the algebraic equations. If the answer is a fraction,
reduce and convert it to a mixed number.

(answer sheet)

1.) $x + 7 - 4(x + 1) = -10$

$$x + 7 - 4x - 4 = -10$$

$$-3x + 3 = -10$$

$$-3x = -13$$

$$x = 4 \frac{1}{3}$$

3.) $20 + 3x - 15 + x = 27$

$$5 + 4x = 27$$

$$4x = 22$$

$$x = 5 \frac{1}{2}$$

2.) $5x - 4 + 2(x - 4) = 16$

$$5x - 4 + 2x - 8 = 16$$

$$7x - 12 = 16$$

$$7x = 28$$

$$x = 4$$

4.) $11 - 2x + 8x + 5 = 32$

$$16 + 6x = 32$$

$$6x = 16$$

$$x = 2 \frac{2}{3}$$

5.) $5(2x - 7) + 42 - 3x = 2$

$$10x - 35 + 42 - 3x = 2$$

$$7x + 7 = 2$$

$$7x = -5$$

$$x = -5/7$$

6.) $2(4x - 2) - 5x = -18$

$$8x - 4 - 5x = -18$$

$$3x - 4 = -18$$

$$3x = -14$$

$$x = -4 \frac{2}{3}$$

7.) $30 - 6(x + 3) + 2x = 8$

$$30 - 6x - 18 + 2x = 8$$

$$12 - 4x = 8$$

$$-4x = -4$$

$$x = 1$$

8.) $23 + 4(x - 3) - x = 11$

$$23 + 4x - 12 - x = 11$$

$$11 + 3x = 11$$

$$3x = 0$$

$$x = 0$$

9.) $2x - 14 + 3(x + 1) = -4$

$$2x - 14 + 3x + 3 = -4$$

$$5x - 11 = -4$$

$$5x = 7$$

$$x = 1 \frac{2}{5}$$

10.) $6(2x + 2) + 12 = 50$

$$12x + 12 + 12 = 50$$

$$12x + 24 = 50$$

$$12x = 26$$

$$x = 2 \frac{1}{6}$$

Algebraic Expressions

(answer sheet)

Simplify the following expressions.

1.) $5a + 6a = 11a$

2.) $3a + a = 4a$

3.) $8a - 3a = 5a$

4.) $10a - 2a = 8a$

5.) $9a + 4a = 13a$

6.) $11a - 7a = 4a$

7.) $4b + 3b = 7b$

8.) $12b - 6b = 6b$

9.) $5b + 9b = 14b$

Complete the following expressions.

1.) $12 \times 3 - 5 + 4 = 35$
 $36 - 5 + 4$
 $31 + 4$

2.) $4 + 7 \times 2 - 8 = 10$
 $4 + 14 - 8$
 $18 - 8$

3.) $5 - 7 + 2 \times 10 = 18$
 $5 - 7 + 20$
 $20 - 2$

4.) $15 \div 3 + 8 \times 5 = 45$
 $5 + 8 \times 5$
 $5 + 40$

5.) $11 \times 3 - 12 \div 4 = 30$
 $33 - 12 \div 4$
 $33 - 3$

6.) $5 + 9 - 16 \div 2 = 6$
 $5 + 9 - 8$
 $14 - 8$

Combine like terms to simplify the following expressions.

1.) $3a(a + 4) - 2a + 7 = 3a^2 + 10a + 7$
 $3a^2 + 12a - 2a + 7$

2.) $5a + 3a - 15 \div 3 = 8a - 5$
 $5a + 3a - 5$

3.) $4(3 + 9) + 10a - 4a = 48 + 6a$
 $4(12) + 10a - 4a$
 $48 + 10a - 4a$

4.) $(21 \div 7)(4a + a) - 12 = 15a - 12$
 $3(4a + a) - 12$
 $3(5a) - 12$

5.) $17 + 4(3 + a) - a = 29 + 3a$
 $17 + 12 + 4a - a$
 $29 + 4a - a$

6.) $10a - 4a + 27 \div 3 = 6a + 9$
 $10a - 4a + 9$

Multiplying Decimals

Solve each multiplication below.

1. $9.1 \times 7.4 = \underline{67.34}$

10. $8.501 \times 5.736 = \underline{48.761736}$

2. $2.54 \times 3.82 = \underline{9.7028}$

11. $3.4 \times 4.003 = \underline{13.6102}$

3. $3.93 \times 5.1 = \underline{20.043}$

12. $00.71 \times 5.5 = \underline{3.905}$

4. $1.80 \times 6.2 = \underline{11.16}$

13. $65.091 \times 1.629 = \underline{106.033239}$

5. $6.78 \times 4.3 = \underline{29.154}$

14. $3.8291 \times 8.3167 = \underline{31.84547597}$

6. $10.6 \times 9.0 = \underline{95.4}$

15. $0.2451 \times 4.004 = \underline{0.9813804}$

7. $44.1 \times 89.2 = \underline{3,933.72}$

16. $.1299 \times 339.0 = \underline{44.0361}$

8. $0.736 \times 2.71 = \underline{1.99456}$

17. $00.007 \times 0.8100 = \underline{0.00567}$

9. $9.77 \times 66 = \underline{644.82}$

18. $08.13 \times 2.2007 = \underline{17.891691}$

Remember!

Line up your decimals!

$$\begin{array}{r} 16.27 \\ \times 0.5138 \\ \hline \end{array}$$